Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.





WATER SUPPLY OUTLOOK FOR UTAH

Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

UTAH STATE DEPARTMENT OF NATURAL RESOURCES -- DIVISION OF WATER RIGHTS

In cooperation with U.S. Forest Service, Bureau of Reclamation, Utah Fish and Game Dept., Utah State University, U.S. National Park Service, U.S. Geological Survey, and other Federal, State, and private organizations.

FEB. 1, 1971

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbis Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters of key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

WATER SUPPLY OUTLOOK FOR UTAH

and FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

KENNETH E. GRANT

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

Released by

A. W. HAMELSTROM

STATE CONSERVATIONIST SOIL CONSERVATION SERVICE SALT LAKE CITY, UTAH

In Cooperation with

HUBERT C. LAMBERT

STATE ENGINEER
DIVISION OF WATER RIGHTS
UTAH STATE DEPT. OF NATURAL RESOURCES

Report prepared by

BOB L. WHALEY, Snow Survey Supervisor

and

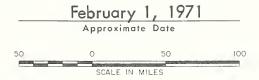
PAUL KEIL, Assistant Snow Survey Supervisor

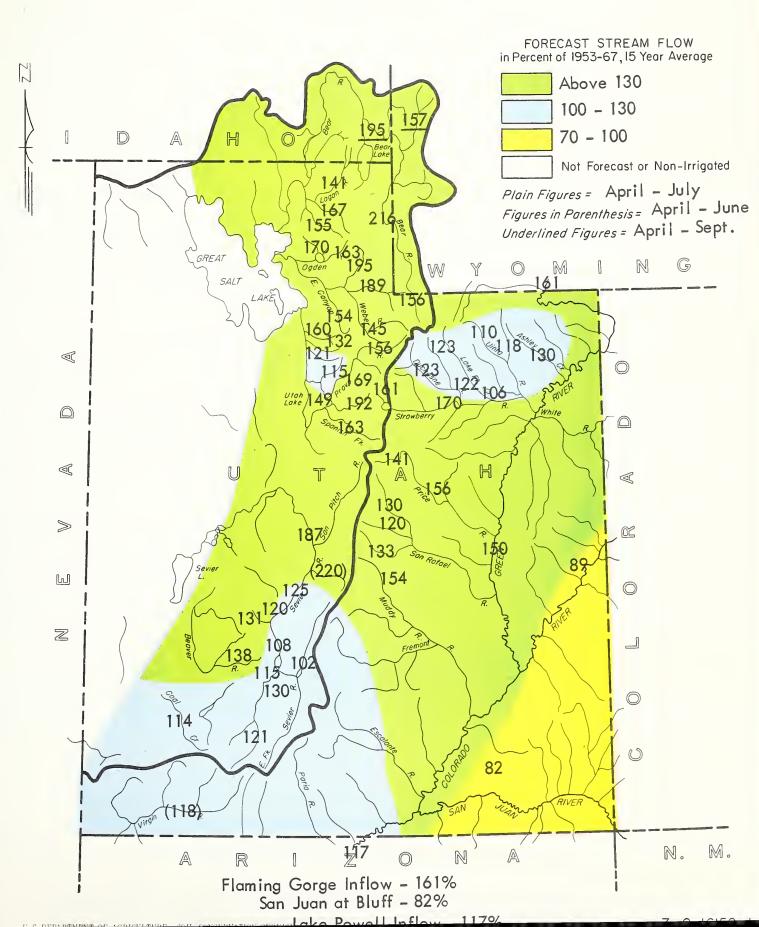
SOIL CONSERVATION SERVICE SNOW SURVEY SECTION FEDERAL BLDG., ROOM 5434 SALT LAKE CITY, UTAH 84111



PROSPECTIVE WATER SUPPLIES

Based on Snow Surveys Made on UTAH and BEAR RIVER WATERSHEDS







WATER SUPPLY OUTLOOK

as of

FEBRUARY 5, 1971

NORTHERN UTAH

The Water Supply Outlook for northern Utah is excellent again this year.

January precipitation from about Salt Lake north into Idaho was well above average with many stations reporting better than 200% of average for the month.

Warm temperatures during the last half of the month melted valley and intermediate elevation snow cover, but high elevation snow courses in this part of the state showed above average gain in water content for the month. February 1, snow cover ranges from near average on the American Fork River to 180% on the Logan, Farmington Creek and Smith's Fork on the Bear River. Ogden River has 172%, Weber River 157%, and Parleys and Big Cottonwood Creeks about 148% of the average snow water content for February 1. Provo River had 147%, Spanish Fork and Strawberry Valley 146% of average snow cover.

Reservoirs in northern Utah are all well above average except Pineview which was drawn down to allow work in the reservoir area. Hyrum and Porcupine Reservoirs now have 10,700 and 4,800 acre feet of storage. Last year they held 10,500 and 2,500 acre feet on February 1. Bear Lake held 1,098,700 acre feet on February 1. Weber River reservoirs - Rockport, Echo, East Canyon and Lost Creek now hold 138,600 acre feet. These reservoirs have 64,300 acre feet of useable storage space remaining to be filled with spring runoff.

Deer Creek now holds 99,000 acre feet in storage, 112% average and Strawberry 187,800 acre feet (160%). Utah Lake is 0.8 foot below compromise and has 815,400 acre feet in storage. The lake is expected to reach compromise level about late March.

WATER SUPPLY OUTLOOK (continued)

EASTERN UTAH

Water supplies in eastern Utah as of February 1, are expected to be good to excellent for the coming season, with good snow cover and excellent reservoir carry-over.

Snow cover remains well above the February 1 average except for the upper Escalante and part of the East Fork of the Sevier in the Widtsoe area, which ranges from 96% to 100% of the 1953-67 long term average. The high Uintas range from 157% at the headwaters of the Duchesne, and Bear River on the north slope to 124% at Lake Fork Creek to 134% in Ashley Creek. The Price and San Rafael River are 138 and 121% respectively. The snow cover on the headwaters of the Muddy and Escalante Rivers is excellent with 165% of their average February 1 snow cover. In general the snow cover looks good, ranging from good to excellent for the eastern section of Utah in spite of the warm spring like January which just occurred.

Reservoir storage is well above average except for Moon Lake (10,000 A.F.) which as of February 1 was only 76% of its 1953-67 average. All other reservoirs range from 140% (Steinaker nr Vernal, 21,890 A.F.) to Scofield Reservoir with 202% (41,200 A.F.) and Strawberry at 160% (187,800 A.F.). The two new reservoirs - Starvation by Duchesne and Joe's Valley by Orangeville are beginning to fill due to the warm spring like weather during January. Flaming Gorge now holds 1,777,000 A.F. as to 1,516,000 A.F. as of February 1, 1970, and with good snow cover along the north slope of the Uintas and a 161% Flaming Gorge inflow forecast, the elevation and storage should increase to previous levels or above.

Generally the Oct-Jan. precipitation ranges above average from the San Rafael north and slightly below average south of the San Rafael. This parallels the snow cover pack for this eastern area.

Streamflow forecasts range from 106% for Lakefork below Moon Lake on Lakefork Creek to 170% for Strawberry at Duchesne on the Strawberry River. The south slope of the high Uintas ranges from 110% (Uinta at Neola) to 142% (Duchesne at Randlett). On the Price River, Scofield Reservoir inflow looks excellent with 141% of its 1953-67 average inflow. Also the San Rafael and Muddy Rivers look good, averaging 128% and 154%, respectively. Flaming Gorge inflow is expected to flow 161% of average (1,700,000 A.F.). It looks like a good April-July streamflow run-off if average or above conditions prevail with good to excellent prospects of additional filling for Flaming Gorge, Starvation, Strawberry and Joe's Valley Reservoirs.

Water supplies are expected to be good to excellent and should meet demands in eastern Utah if average conditions prevail through the remainder of the winter season.

WATER SUPPLY OUTLOOK (continued)

CENTRAL AND SOUTHERN UTAH

The Water Supply 0_u tlook for Central and Southern Utah ranges from "near average" on the East Fork of Sevier to "much above" average on Salina Creek. Snow cover varies from 96% on the head of the Escalante River to 188% of February 1 average on Salina Creek. Reservoir storage totals better than twice average and streamflow forecasts range from 90% of average on Antimony Creek to 220% on Salina Creek for the April-July period.

Precipitation was generally very light during January and warm temperatures during the last half of the month melted valley and intermediate elevation snow. Snow cover on higher snow courses where the major portion of spring and summer streamflow is produced still show average or better snow water contents.

The East Fork of the Sevier averages 100% of the February 1 snow cover and the Sevier above Panguitch 129%. The Virgin is also 129% of average and Coal Creek 123%. Beaver River is 137% of the February 1 average and Clear Creek 113%. Chalk Creek near Fillmore is 151% and Salina Creek 188% of the average for February 1.

Reservoir storage is well above average on the Sevier. Otter Creek holds 41,900 acre feet (220%), Piute 41,600 acre feet (140%) and Sevier Bridge 197,600 acre feet (298%). Minersville held 15,000 acre feet (168%) on February 1.

Streamflow forecasts for this area of the State range from 90% of average on Antimony Creek to 220% on Salina Creek. The Sevier is expected to flow 40,000 acre feet (121%) at Hatch, 32,000 acre feet (120%) at Circleville, 17,700 acre feet (115%) at Kingston during the April-July period. The inflow between Kingston and Vermillion Dam is expected to be 36,000 acre feet (120%) during April-June and Vermillion Dam to Gunnison 56,000 acre feet (135%) March-June. The Sevier at Gunnison is expected to flow 58,000 acre feet (187%) during the April-July period. The October-March inflow to Sevier Bridge is expected to total 95,000 to 115,000 acre feet this year as a result of good fall and winter flow again this year. The San Pitch River is adding a good flow to the Sevier at Gunnison for the third year in a row.

Beaver River is expected to flow 26,000 acre feet (138%) for the April-July period. Coal Creek 15,700 acre feet (114%) and Minersville Reservoir inflow is expected to be 5,500 acre feet (117%) for the April-June period. Chalk Creek near Fillmore is forecast to flow 16,600 acre feet (126%) and Clear Creek 16,400 acre feet (131%) during the April-July period.

Streamflow forecasts in northern Utah range from 115% of average on the American Fork River to about 260% on the Bear near Randolph for the April-July period.

WATER SUPPLY OUTLOOK (continued)

Logan River is expected to flow 140,000 acre feet (141%), Blacksmith Fork 70,000 acre feet (167%) and Little Bear 65,000 (155%). Bear River near Utah-Wyoming line is forecast to flow 165,000 acre feet (156%) during the April-July period.

April through June forecasts for the inflow to Pineview Reservoir and South Fork of the Ogden River are 153,000 acre feet (170%) and 75,000 acre feet (163%) respectively. The Weber is forecast 135,000 acre feet (145%) at Oakley, 161,000 acre feet (158%) for Rockport Reservoir inflow and 162,000 acre feet (162%) at Coalville for the April-June period.

Chalk Creek is expected to flow 49,000 acre feet (189%) and Lost Creek 22,000 acre feet (195%). East Canyon is forecast to flow 26,000 acre feet 151%) for the April-June period.

Parleys Creek is forecast to flow 15,000 acre feet (160%), Big Cottonwood 45,000 acre feet (132%), Little Cottonwood 40,000 acre feet (121%) and Farmington Creek 10,900 acre feet (160%) during the April-July period.

RESERVOIR STORAGE (Thousand Acre Feet) END OF MONTH

_	DESERVOIR	Usable		Usable Storage	
Basin or Stream	RESERVOIR	Capacity	This Year	Last Year	Average
	GREAT BASIN				
Bear River	Bear Lake Woodruff Narrows	1421.0 26.5	1098.7 · 25.5	1121.0 18.7	854.0
Beaver River	Minersville(Rky Fd	23.3	15.0	20.0*	8.9
Little Bear	Hyrum Porcupine	15.3	10.7	10.5 2.5	10.2
<u>Ogden</u>	Causey Pineview	7.1 110.1	5.7 16.9	1.0	 26.1
Provo	Deer Creek	149.7	99.0	90.8	88.3
<u>Sevier River</u>	Gunnison Otter Creek Piute Sevier Bridge	18.2 52.5 71.8 236.0	17.3 41.9 41.6 197.6	16.8 52.4 63.6 192.9	19.0 29.6 66.2
Spanish Fork	Strawberry	270.0	187.8	190.8	117.6
Utah Lake	Utah Lake	883.9	815.4	844.2	518.9
Weber	East Canyon Echo Lost Creek Rockport Willard Bay	48.1 73.9 20.0 60.9 193.3	39.5 62.2 13.4 23.5 175.4	36.9 49.1 13.1 22.2 98.7	31.7 25.2b
	COLORADO RIVER DRA	AINAGE			
Ashley Creek	Steinaker	33.3	21.9	22.1	15.6b
<u>Colorado</u>	Blue Mesa Lake Powell	829.5 25002.0	540.5 12228.0	589.7 9375.0	 5161.7b
Green	Flaming Gorge	3749.0	1777.0	1516.0	1299.0b
Lake Fork	Moon Lake	35.8	10.8	12.1	14.2
Price River	Scofield	65.8	41.2	49.6	20.4
San Rafael	Joe's Valley	54.6	38.6	42.5	
San Juan	Navajo	1696.4	937.6	1012.3	284.0b
Strawberry	Starvation	165.3	114.4	26.4	

REAMFLOW FORECASTS	THIS YEAR FORECAST		T	PAST RECORD		
BASIN STREAM and/or FORECAST POINT	Thousand	Percent of	FORECAST PERIOD	Last Year	Average	
	Acre Feet	Average	PERIOD		1	
BEAR RIVER SYSTEM						
Bear at Harer, Idaho	440	195	Apr-Sept		226	
Bear nr Randolph	190	260	Apr-July		73	
Bear nr Ut-Wyo State Line	165	156	Apr-July		106	
Bear nr Woodruff	225	216	Apr-July		104	
Big Crk nr Randolph, Utah	9.5	198	Apr-July		4.8	
Blacksmith Fork nr Hyrum	70	167	Apr-July		42	
Little Bear nr Paradise	65	155	Apr-June		42	
Logan nr Logan (1)	140	141	Apr-July		99	
Smith's Fork nr Border, Wyoming	170	157	Apr-Sept		108	
Woodruff Crk nr Woodruff, Utah	26	193	Apr-July		13.5	
WEBER-OGDEN RIVERS						
Chalk Crk at Coalville	49	189	Apra June		26	
East Canyon Crk nr Morgan (2)	26	151	Apr-June	28	17.	
Hardscrabble Crk nr Porterville	21	156	Apr-June	34	13.	
Lost Crk nr Croydon, Utah	22	195	Apr-June		11.	
Pineview Reservoir Inflow (3)	153	170	Apr-June	105	90	
South Fork Ogden nr Huntsville	75	163	Apr-June		46	
Rockport Reservoir Inflow (4)	161	158	Apr-June	115	110	
Weber nr Coalville (5)	162	162	Apr-June		100	
Weber nr Oakley	135	145	Apr-June	111	93	
PROVO RIVER & UTAH LAKE						
American Fork nr American Fork	20	115	Ann Tular	26	26	
	30	115	Apr-July	26	13.0	
Hobble Crk nr Springville	25	192	Apr-July		87	
Provo nr Hailstone (6) Provo below Deer Crk Dam (7)	136	156	Apr-July		96	
	162	169	Apr-July			
Spanish Fork at Thistle Strawberry Reservoir Inflow (8)	44	163	Apr-July	2.5	27	
Utah Lake Inflow		161	Apr-July	35	195	
Utan Lake Inflow	290	149	Apr-July		193	
JORDAN RIVER & SALT LAKE						
Big Cottonwood nr SLC	45	132	Apr-July	38	34	
Farmington Crk nr Farmington	10.9	160	Apr-July		6.8	
Little Cottonwood Crk nr SLC	40	121	Apr-July	37	33	
Parley's Crk nr SLC	15.0	160	Apr-July	13.2	9.4	
	15.0	100				
FOOTNOTES - See last page						

STREAMFLOW FORECASTS		THIS YEA	R	PAST R	RECORD
	FORE	CAST	FORECAST	THOUSAND A	
BASIN STREAM and or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average +
SEVIER RIVER					
SEVIER RIVER					
Chalk Creek nr Fillmore	16.6	126			13.2
Clear Crk nr Sevier (Above Div.)	16.4		Apr-July		12.5 b
East Fork Sevier nr Kingston (9)	12.0		Apr-July		11.7
Antimony Crk nr Antimony	7.0	90	Apr-July		7.8 b
Inflow					
Kingston to Vermillion Dam	36	120	Apr-June		30 b
Vermillion Dam to Gunnison	56	125	Mar-June		45 b
Salina Crk at Salina (10)	13.0	220	Apr-June		5.9 %
Sevier nr Circleville	32		Apr-July		27
Sevier nr Gunnison	58	187	Apr-July	68	31 b
Sevier at Hatch	40	121	Apr-July	22	33
Sevier nr Kingston	17.7		Apr-July	6.7	15.4
Sevier below Piute Dam (11)	30	103	Apr-July		29
SAN PITCH RIVER					
Ephraim Creek nr Ephraim	20	144	Apr-July		13.9 b
Pleasant Crk nr Mt. Pleasant	11.0		Apr-July		7.8 b
BEAVER RIVER					
D		1.00			1.0.0
Beaver nr Beaver MinersvilleReservoir Inflow (12)	26	138	Apr-July Apr-June	23	18.9
PROTECTION (12)	7.0	11/	Apr-Julie		4.7
COAL CREEK					
Coal Crk nr Cedar City	15.7	3 1/1	Apr-July		13.8
Coar Cik iii Cedar City	15.7	114	Apr-July		13.0
COLORADO RIVER BASIN					
Green River Tributaries in Utah					
FLAMING GORGE TO DUCHESNE RIVER					
Ashley Creek nr Vernal	57		Apr-July		44
Henry's Fork at Linwood	50	131	Apr-Sept		38
FOOTNOTES - See last page					

STREAMFLOW FORECASTS		THIS YEA	R		RECORD
BASIN STREAM and/or FORECAST POINT	FORE	Percent of	FORECAST		ACRE FEET Average †
BASIN STREATH and OFF ORECAST FORM	Acre Feet	Average	PERIOD .	Last Year	Average '
DUCHESNE RIVER					
Joonasta Itavar					
Duchesne nr Tabiona (13)	116		Apr-July		94
Duchesne at Duchesne (13)	204	122	Apr-July		167
Duchesne at Myton (16)	320	132	Apr-July		243
Duchesne at Randlett (16)	372	142	Apr-July Apr-July		49
Strawberry at Duchesne Rock Crk nr Mtn. Home	108	170 123	Apr-July		88
Lakefork below Moon Lake (14)	70	106	Apr-July	51	66
Yellowstone nr Altonah	74	125	Apr-July	31	59
Uinta nr Neola	87	110	Apr-July		79
Whiterocks nr Whiterock	60	118	Apr-July	55	51
PRICE RIVER					
Gooseberry Crk nr Scofield	12.8	128	Apr-July		10.0
Price nr Heiner (15)	84	156	Apr-July		54
Scofield Reservoir Inflow (15)	45	141	Apr-July		32
SAN RAFAEL RIVER					
_Cottonwood Crk nr Orangeville	53	120	Apr-July		44
Ferron Crk nr Ferron	44	133	Apr-July		33
Huntington Crk nr Huntington	55	130	Apr-July		42
MUDDY RIVER					
And the second of the second o	25	154	Ann Tulu		16.2 h
Muddy Creek nr Emery	25	174	Apr-July		10.2 1
VIŔGIN RIVER					
Virgin nr Virgin	45	118	Apr-June	21	38
UPPER COLORADO BASIN					
Colorado nr Cisco, Utah (15)	2507	89	Apr-July	4066	2802
Flaming Gorge Inflow (3)	1700	161	Apr-July	985	1054
Lake Powell Inflow (3)	7610	117	Apr-July	8220	6527
Green at Green River, Utah (15)	3860	150	Apr-July	2970	2574
San Juan nr Bluff, Utah (15)	730	82	Apr-July	698	890
Navajo Reservoir Inflow	500	80	Apr-July	446	619
FOOTNOTES - See last page					
r					

FORECAST POINT	PEAK FLOW (SECOND FEET)		
TORECAST TOINT	Forecast Range	Average +	
NORTHERN UTAH			
Big Creek near Randolph Big Cottonwood Creek near SLC Hobble Creek near Springville Spanish Fork near Thistle So. Fork Ogden River nr Huntsville	80 - 120 450 - 600 190 - 450 310 - 795 775 - 1025	43 310 180 307 643	
EASTERN UTAH			
Ferron Creek near Ferron Muddy Creek near Emery Strawberry River at Duchesne	485 - 795 170 - 300 900 - 1200	414 142 558	
SOUTHERN and CENTRAL UTAH		-	
Beaver River near Beaver Clear Creek near Sevier Coal Creek near Cedar City Salina Creek near Salina Sevier River at Hatch Sevier River at Circleville Sevier River at Kingston Virgin River at Virgin	200 - 350 160 - 180 250 - 350 260 - 320 330 - 575 270 - 480 300 - 390 620 - 1000	215 156b 217 133* 370 292 223 557	
*Highly abnormal weather during the critical melting period may caus	se the peak to be outside the indicated ran	ge.	

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Clear Creek nr Sevier (above Div.)	5	July 25	July 19
Salina Creek at Salina	25	June 15	June 10
Sevier at Circleville(Circle Valley)	90	June 23	June 24
Sevier at Hatch (upper)	100	July 11	Ju1y 10

WSFB-X10-L

PRIMARY WATER RIGHT FORECASTS (PERCENT OF WATER RIGHT DELIVERED)

RIVER SECTION	Percent Forecast For This Year	Average Percent Delivered During 15 year Period	Forecast Period
Sevier River Below Vermillion Dam Circle Valley Panguitch Valley Sevier Valley	63	58	Apr-Sept
	75	66	Apr-Sept
	85	84	Apr-Sept
	40	40	Apr-Sept

OTHER SPECIAL FORECASTS

Below Vermillion - Flow above 360 second feet should total about 3500 - 4500 acre feet this season.

Inflow to Sevier Bridge Reservoir from October 1 to March 31 is expected to be 95,000 - 115,000 acre feet.

SUMMARY OF SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

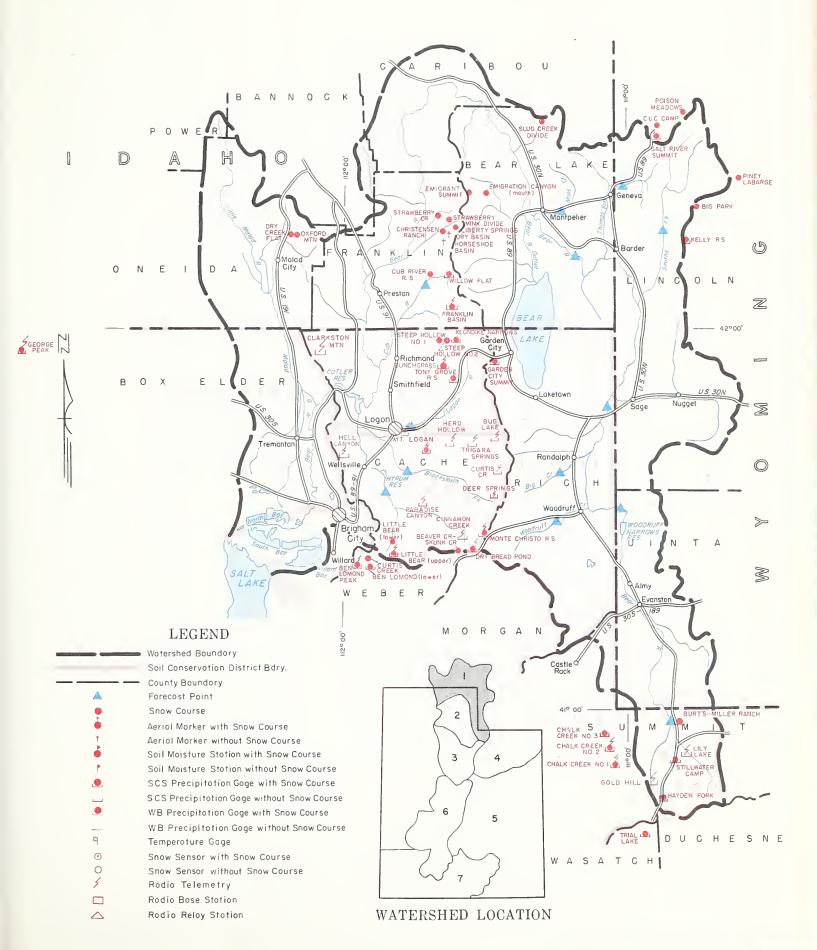
RIVER BASIN and/or SUB-WATERSHED	Number of Courses		ATER AS PERCENT OF
	Averaged	Last Year	Average
BEAR RIVER		•	
Bear River So. of Evanston, Wyo.	2	155	168
Blacksmith Fork - Little Bear River	4	173	181
Cub River (Idaho)	1	174	180
Emigration Creek (Idaho)	2	139	194
ogan River	5 2	166	180
Malad River		134	199
Smith's Fork of Bear River (Wyo.)	5 3	160	179
Strawberry-Mink Creeks	3	150	182
WEBER-OGDEN RIVERS			
Chalk Creek Above Coalville	2	124	145
East Canyon Creek		121	1 50
Farmington Creek	2 2	126	180
Ogden River	5 6	159	172
Weber River Above Coalville	6	131	1 57
UTAH LAKE, JORDAN RIVER & TOOELE			
VALLEY WATERSHEDS			
American Fork River	2	131	101
Hobble Creek	_		
Mt. Nebo Area	2	100	128
Provo River above Deer Creek Dam Salt Lake Area	5	150	141 148
Spanish Fork River	3	117 112	132
Strawberry Reservoir Valley	3	134	146
Tooele Area	1	126	148
SEVIER RIVER			
Beaver River	3	108	137
Chalk Creek near Fillmore	1	109	151
Chicken Creek near Levan Clear Creek above Sevier	- 1	96	113
East Fork Sevier River	4	184	100
Ephraim Creek	2	114	147
Manti Creek	-		emp Cris
Mt. Pleasant Area	2	112	140
Salina Creek	2	120	188
Sevier River above Panguitch	3	382	129
Twelve Mile Creek near Mayfield			

SUMMARY OF SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses		ATER AS PERCENT OF
	Averaged	Last Year	Average
TITLE OF THE CONTRACT OF THE C	•		
UINTAH BASIN & NORTH SLOPE UINTAH			
MOUNTAINS			
Ashley-Brush Creeks	2	183	134
Black's Fork & Smith's Fork Rivers	_	707	1) 4
Duchesne River above Tabiona	3	156	157
Henry's Fork River & Sheep Creek	ر د		
Lakefork River	2	174	124
Strawberry River	2 3 3	146	130
Uintah-Whiterocks Rivers	3	171	138
		,	
CARBON, EMERY, WAYNE, GRAND & SAN			
JUAN COUNTIES			
Blue Mountains near Monticello			
Fremont River	1		165
LaSal Mountains near Moab	ı	99	165
Muddy River	_		
Price River	4	119	138
San Rafael River	6	92	121
		72	121
EAST GARFIELD, KANE, WASHINGTON &			
IRON COUNTIES			
Coal Creek near Cedar City	2	227	100
Escalante River	3	227	123
New Harmony to Newcastle	-	154	96
Paria River	_		
Parowan Creek	1	237	116
Virgin River	4	328	129
,		,	127
	,		
	=		

BEAR RIVER BASIN





INDEX

		1 1 1				
NO.	STATE	NAME Upper bear river (a	se c. above Harer, Idaho)	TWP.	RGE.	ELEV.
10G11 10J6P 10G7 10J36p 10J7P 10G12 10J35p 11H12P 10G10 10G6 10G8P 10J17P	<pre>\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$</pre>	Big Park Burts-Miller Ranch CCC Camp x Gold Hill Hayden Fork Kelly Ranger Station Lily Lake Monte Cristo R.S. Piney LaBarge x Poison Meadows x Salt River Summit x Stillwater Camp	7 19 9 11 25 13 34 4 19 29 32 32	30 N	117W 10E 118W 9E 9E 118W 10E 4E 114W 116W 118W 10E	8,700 7,900 7,500 10,000 9,400 8,200 9,300 8,960 8,820 8,500 7,900 8,550
		LOWER BEAR RIVER ((below Harer, Idaho)			
11H14M 11H37p 11H36p 11G11 11H38p 12H1p 11G12 11H33*P 11H39p 11G14a 11H13MP 12G4 11G6 11G7 11G8MP 11H7MP 12H2p 11H40p 11G15a 11H1MP 11G13 11H26 11H25P 11H6 12G3 11H46p 11G5 11H27 11H28 11G9 11G10 11H3M 11H41p 11G4P		Beaver Creek-Skunk Creek Bug Lake Bunchgrass Christensen Ranch Cinnamon Creek Clarkston Mtn. Cub River Ranger Station Curtis Creek Deer Springs Dry Basin Dry Bread Pond x Dry Creek Flat Emigrant Summit Emigration Canyon (mouth) Franklin Basin Garden City Summit Hell Canyon Herd Hollow Horseshoe Basin Klondike Narrows Liberty Springs Little Bear (lower) Little Bear (upper) Mt. Logan Oxford Mountain Paradise Canyon Slug Creek Divide Steep Hollow #1 Steep Hollow #2 Strawberry Creek Strawberry Mink Divide Tony Grove Ranger Station Trigara Springs Willow Flat		8 N N N N N N N N N N N N N N N N N N N	3E 5E 3E 3E 3E 3E 41E 42E 42E 42E 42E 42E 42E 42E 42	7,150 7,950 8,400 5,600 7,300 6,300 5,400 8,450 8,450 8,450 8,450 7,900 8,230 6,350 7,350 6,500 8,000 7,600 6,400 7,000 8,420 6,000 6,550 9,000 6,800 7,650 7,650 7,700 5,800 6,800 6,250 7,600 6,100

	LEGEND
	Numbering system (example)
10.17	Snow Course Only
10]7m	Soil Moisture Station Only
10 7a	Aerial Marker Only
10]7p	Precipitation Gage Only
10J7s	Snow Sensor Only
10]7T	Temperature Gage Only
10]7A	Snow Course and Aerial Marker
10J7M	Snow Course and Soil Moisture Station
10J7P	Snow Course and Precipitation Gage
10]7MA	Snow Course and Soil Moisture Station and Aerial Marker
I0J7MP	Snow Course and Soil Moisture Station and Precipitation Gage
10J7S	Snow Course and Snow Sensor
×	Adjacent Drainage
	B 11 B 1

^{*} Radio Telemetry

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR		PAST RECORD Water Content (inches)	
NAME	Elevation	Date Snow Depth of Survey (Inches)		Water Content (Inches)	Last Year Aver	
				-		
UPPER BEAR RIVER (Above Harer, Idaho)						
Big Park CCC Camp Chalk Creek #2 x Chalk Creek #3 x Monte Cristo R.S. Piney-LaBarge #2 Salt River Summit x Smith & Morehouse x Trial Lake x Chalk Creek #1 Kelly Ranger Station	8700 7500 7900 7500 8960 8820 7900 7600 9800 9100 8200	1/28 2/1 1/27 1/27 1/29 1/29 1/29 1/28 1/29 1/27 1/28	70 46 41 24 79 76 62 36 76 64 63	21.4 14.1 12.2 6.6 29.3 24.8 19.1 10.5 26.8 23.0 18.9	13.9 8.6 9.7 5.5 15.2 15.6 11.3 8.0 16.0	12.4 7.5 8.4 4.6 16.0 14.6 9.7 7.4 14.8
LOWER BEAR RIVER (Below Harer, Idaho)						
Beaver Crk-Skunk Crk. x Christensen Ranch Cub River R. S. Dry Bread Pond x Dry Creek Flat Emigrant Summit Garden City Summit Klondike Narrows Liberty Springs A Monte Cristo R. S. Oxford Mountain Steep Hollow #1 Steep Hollow #2 Strawberry Creek Strawberry Mink Divide Tony Grove R. S. Willow Flat Emigration Canyon(mouth) Dry Basin A Horseshoe Basin A	7150 5600 5400 8230 6350 7350 7600 7400 8420 8960 6800 7700 5800 6250 6100 6500 7900 8000	1/29 1/27 1/28 1/29 1/25 1/25 1/25 1/25 1/25 1/25 1/25 1/27 1/27 1/27 1/27 1/28 1/29 1/30 1/30	33 35 34 55 31 79 61 71 131 79 34 112 80 71 47 53 38 94 85	11.9 9.1 9.0 20.2 10.0 27.4 19.0 22.8 45.5 29.3 10.1 40.8 28.6 11.1 23.5 14.2 16.9 12.6 32.6 29.5	7.0 5.1 6.4 11.3 6.0 19.4 13.0 12.6 25.2 15.2 9.0 23.9 17.4 6.1 15.8 8.7 9.7 9.5 22.3 16.0	7.2 10.3 4.5; 14.2; 10.8 12.31 16.01 5.6; 22.61 17.01 6.9; 13.0; 7.1 9.4; 6.4
OOTNOTES - See last page						

PRECIPITATION (Inches)

DRAINAGE BASIN and	EL EVATION	Date of	Month's			PROX. OCT. I	Percent of
PRECIPITATION GAGE LOCATION	ELEVATION	Date of Reading	Month's Precipitation	Average +	This Year	Average +	Average
			,				
BEAR RIVER	-						
halk Creek #2 x 4	7900	2/1	3.52	3.02b		8.80*	
Chalk Creek #3 x	7500	1/27	2.11*	1.82b		8.37ь	154
Ory Bread Pond Garden City Summit	8230 7600	1/29 1/25		4.47* 3.22b		11.75* 11.52*	230 185
Clondike Narrows 4	7400	2/1	13.87	5.24*		14.15*	
Monte Cristo #2 4 Sagebrush Flat x	8960 6300	1/29 1/29	8.49	4.94b 2.48b		14.74b 8.28b	208 185
Salt River Summit	7900	1/29	5.70	3.51b	20.55	9.47*	217
Cony Grove R. S. (SCS) Crial Lake x	6250 9800	1/29	6.85	2.40b 4.47b		13.70b 12.89*	- - 197
Jillow Flat	6100	1/28	9.70	4.72	25.07		21
halk Creek #1 x 4	9100	2/1	6.36				
	,						
FOOTNOTES - See last pag	;e						

WEBER - OGDEN WATERSHEDS





INDEX

NO.	STAT	E NAME	SEC.	TWP.	RGE.	ELEV.
		ogden river				
11H14M 11H8P * 11H9P 11H30P 11H35p 11H29 11H13MP 11H34p 11H42p 11H45p 11H15P		Beaver Creek – Skunk Creek Ben Lomond Peak Ben Lomond (lower) Ben Lomond Trail Causey Dam Cutler Creek Dry Bread Pond Guilder's Peak Magpie Middle Fork Ogden Monte Cristo R.S.x Sagebrush Flat	22 3 1 2 34 3 19 21 29 16 4 21	8N 7N 7N 7N 8N 6N 7N 8N 7N 8N 7N	3E 1W 1W 3E 1W 4E 4E 3E 4E 3E	7,150 8,000 6,000 6,000 5,500 6,780 8,230 8,050 7,700 8,420 8,960 6,300
		WEBER RIVER				
11J24 11J1P 11J2MP 11J3MP 11J12P 11J11PTS* 11H44p 11J37p 11H43p 11H21PT 11H31P 11J14 11H32P 11J15PTS* 11J38p 11J6 11J5P 11J39p 11J40p 11J16P 11J4P 10J8P		Beaver Creek R.S. Chalk Creek #1 Chalk Creek #2 Chalk Creek #3 Farmington Canyon (lower) x Farmington Canyon (upper) x Francis Canyon Hardscrabble Hoodoo Knoll Horse Ridge Kilfore Creek Lamb's Canyon x Lost Creek Parley's Canyon Summit Porcupine Redden Mine (lower) Redden Mine (upper) Sergeant Lakes Shingle Mill Flat Silver Lake (Brighton) x Smith & Morehouse Trial Lake x	28 4 17 & 20 7 14 26 29 16 22 1 20 19 27 5 22 1 1 17 15 35 25 5	25 1N 2N 2N 3N 5N 6N 1S 2S 1N 2S 1N 2S 1N 2S	7E 8E 8E 1E 1E 6E 2E 3E 4E 5E 3E 7E 6E 7E 3E 7E 9E	7,500 9,100 7,900 7,500 6,950 8,000 7,400 6,500 8,350 8,260 7,300 6,600 6,125 7,500 8,100 8,500 9,000 8,400 9,900 8,725 7,600 9,800

LEGEND

	Numbering system (example)
10]7	Snow Course Only
10J7m	Soil Moisture Station Only
10 J 7 a	Aerial Marker Only
10J7p	Precipitation Gage Only
10J7s	Snow Sensor Only
10J7T	Temperature Gage Only
10J7A	Snow Course and Aerial Marker
10J7M	Snow Course and Soil Moisture Station
10J7P	Snow Course and Precipitation Gage
10J7MA	Snow Course and Soil Moisture Station and Aerial Marker
10J7MP	Snow Course and Soil Moisture Station and Precipitation Gage
10J7S	Snow Course and Snow Sensor
×	Adjacent Drainage

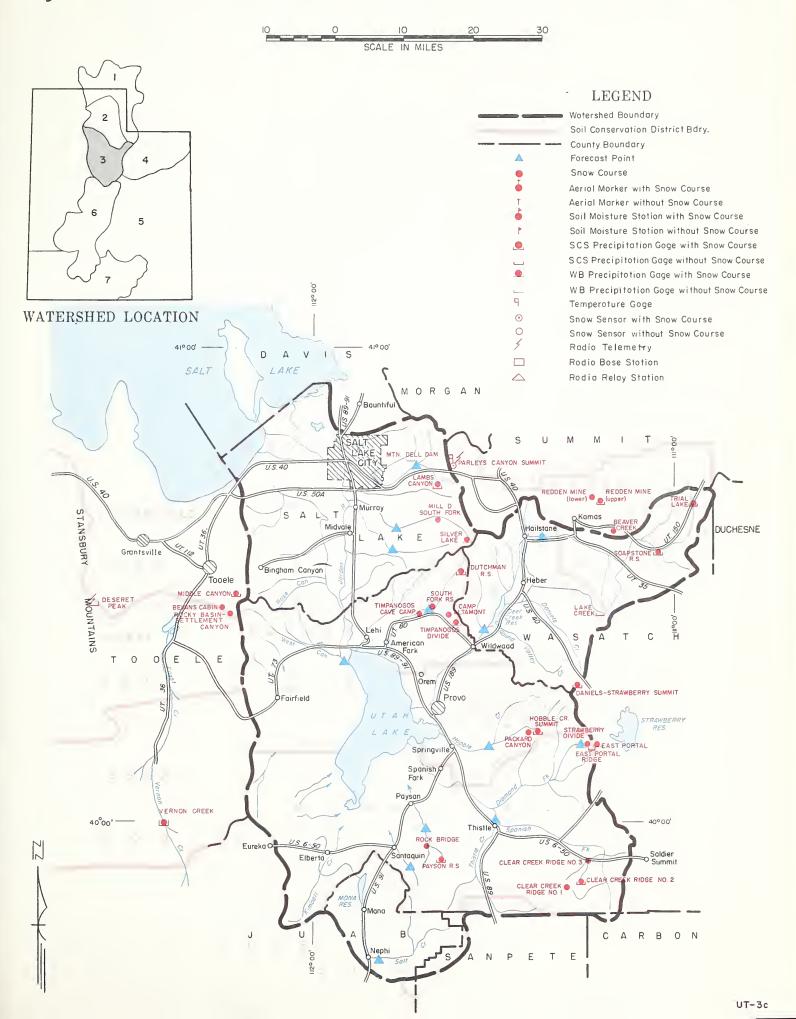
* Radio Telemetry

Ben Lomond (lower) 6000 1/ Ben Lomond Peak 8000 1/ Ben Lomond Trail 6000 1/ Cutler Creek 6780 1/ Dry Bread Pond 8230 1/ Monte Cristo R. S. 8960 1/ Sagebrush Flat 6300 1/		33 40 83 49 68 55 79	11. 14. 31. 16. 23. 20. 29.	7.0 6.9.9 5.10.8 7.16.4 2.11.3 15.2	7.2 8.7 20.1 9.1 15.6 10.3 16.0 3.6
OGDEN RIVER Beaver CrkSkunk Crk. 7150 1/ Ben Lomond (lower) 6000 1/ Ben Lomond Peak 8000 1/ Ben Lomond Trail 6000 1/ Cutler Creek 6780 1/ Dry Bread Pond 8230 1/ Monte Cristo R. S. 8960 1/ Sagebrush Flat 6300 1/	/29 /28 /28 /28 /28 /29 /29	33 40 83 49 68 55 79	11. 14. 31. 16. 23. 20.	7.0 9.9 5 24.0 10.8 7 16.4 2 11.3 3 15.2	7.2 8.7 20.1 9.1 15.6 10.3 16.0
Beaver CrkSkunk Crk. 7150 1/ Ben Lomond (lower) 6000 1/ Ben Lomond Peak 8000 1/ Ben Lomond Trail 6000 1/ Cutler Creek 6780 1/ Dry Bread Pond 8230 1/ Monte Cristo R. S. 8960 1/ Sagebrush Flat 6300 1/	/28 /28 /28 /28 /29 /29	40 83 49 68 55 79	14.0 31. 16. 23. 20.	9.9 24.0 5 10.8 7 16.4 2 11.3 15.2	8.7 20.1 9.1 15.6 10.3 16.0
Ben Lomond (lower) 6000 1/ Ben Lomond Peak 8000 1/ Ben Lomond Trail 6000 1/ Cutler Creek 6780 1/ Dry Bread Pond 8230 1/ Monte Cristo R. S. 8960 1/ Sagebrush Flat 6300 1/ WEBER RIVER	/28 /28 /28 /28 /29 /29	40 83 49 68 55 79	14.0 31. 16. 23. 20.	9.9 24.0 5 10.8 7 16.4 2 11.3 15.2	8.7 20.1 9.1 15.6 10.3 16.0
					5.0
Beaver Creek R. S. 7500 1/					
Chalk Creek #2 7900 1/ Chalk Creek #3 7500 1/ Farmington Canyon (1) x 6950 1/ Farmington Canyon (u) x 8000 1/ Lamb's Canyon x 6600 1/ Parley's Canyon Smt. 7500 1/ Silver Lake (Brighton) x 8725 1/ Smith & Morehouse 7600 1/ Soapstone R. S. x 7800 1/	/29 /27 /27 /29 /29 /28 /28 /28 /29 /29	27 41 24 51 71 38 44 50 36 38 76	7 · 12 · . 6	9.7 5.5 9 16.1 6 22.3 8 12.9 7 14.2 16.8 8.0 8.8	5.2 8.4 4.6 12.0 15.0 8.6 10.5 14.7 7.4 7.7
Kilfore Creek 7300	Survey Survey 27		1	15.6	

PRECIPITATION (Inches)

DRAINAGE BASIN and	CURRENT INFORMATION			FROM A	PPROX. OCT. I	1	
PRECIPITATION GAGE LOCATION	ELEVATION	Date of Reading	Month's Precipitation	Average +	This Year	Average +	Percent o Average
GDEN_RIVER							
		/ -					
en Lomond (lower) en Lomond Trail	6000	1/28	7.26	4.39b		15.46*	172
ausey Dam	5500	1/28 1/29	9.64	4.41b 1.92b	12.15	17.07*	172
ery Bread Pond 4	8230	1/29	7.90	4.47*	27.07	11.75*	230
onte Cristo #2 x	8960	1/29	8.49	4.94b	30.60	14.74b	208
agebrush Flat	6300	1/29	4.34*	2.48b	15.35	8.28ь	185
						:	
EBER RIVER				ļ			
halk Creek #2 4	7900	2/1	3.52	3.02b		8.80*	
halk Creek #3	7500	1/27	2.11*	1.82b	12.87		154
armington Guard Sta.	7500	1/29	6.76	4.69		17.04	
armington Rice arley's Canyon Smt.	7000	1/29 1/28	6.20	4.38 3.94*	25 62	15.35	220
ilver Lake (Brighton) x	1 1	1/31	1.50	5.09	22.56	11.64*	136
mith & Morehouse	7600	1/28	4.21	3.19b	16.62		170
rial Lake x	9800	1/29	6.85	4.47b	25.38	12.89*	197
Chalk Creek #1 4 Sargent Lake 4	9100 8400	2/1 2/1	6.36				
orse Ridge	8260						
ost Creek	6125						
'OOTNOTES - See last pag	e						

UTAH LAKE, JORDAN RIVER AND TOOELE VALLEY WATERSHEDS



INDEX

NO. STATI	E NAME	SEC.	TWP.	RGE.	ELEV.
	PROVO RIVER & UTAH LAK	ΚE			
11J20 U 11K21 U 11K22P U 11K23 U 11J23MP U 11J17P U 11J22P U 11J36P U 11J31 U 11K1P U 11K2 U 11J25P U 11J19 U 11J8 U 11J18P U 11J21P U 10J8P U	Camp Altamont Clear Creek Ridge #1 Clear Creek Ridge #2 Clear Creek Ridge #3 Daniels-Strawberry Summit Dutchman R.S. East Portal Hobble Creek Summit Lake Creek Packard Canyon Payson R.S. Rock Bridge Soapstone R.S. South Fork R.S. Strawberry Divide Timpanogos Cave Camp Timpanogos Divide Trial Lake	29 18 9 27 20 27 36 27 36 21 30 14 9 24 34 & 35 27 33 5	4S 11S 10S 2S 3S 7S 7S 10S 10S 3S 4S 7S 4S 2S	3E 6E 6E 12W 3E 6E 5E 5E 3E 2E 6E 2E 3E 9E	7,300 9,200 8,000 6,600 8,000 7,560 7,560 7,420 9,100 6,400 8,050 6,750 7,800 6,100 8,000 5,500 8,140 9,800
	JORDAN RIVER & GREAT S	SALT LAK	Е		
12J2 U 12J5p U 11J12P U 11J11 U 11J41P U 12J3P U 11J10 U 11J15P U 12J1P U 11J16P U 12K2P U	Bevan's Cabin Deseret Peak Farmington Canyon (lower) Farmington Canyon (upper) Lamb's Canyon #2 Middle Canyon Mill D South Fork Parley's Canyon Summit x Rocky Basin–Settlement Canyon Silver Lake (Brighton) Vernon Creek	24 15 14 26 21 8 18 5 30 35 21	4S 4S 3N 3N 1S 4S 2S 1S 4S 2S 10S	4W 7W 1E 1E 3E 3W 3E 3E 3W 3E 3W 3E 5W	6,450 9,250 6,950 8,000 7,400 7,000 7,400 7,500 8,900 8,725 7,500

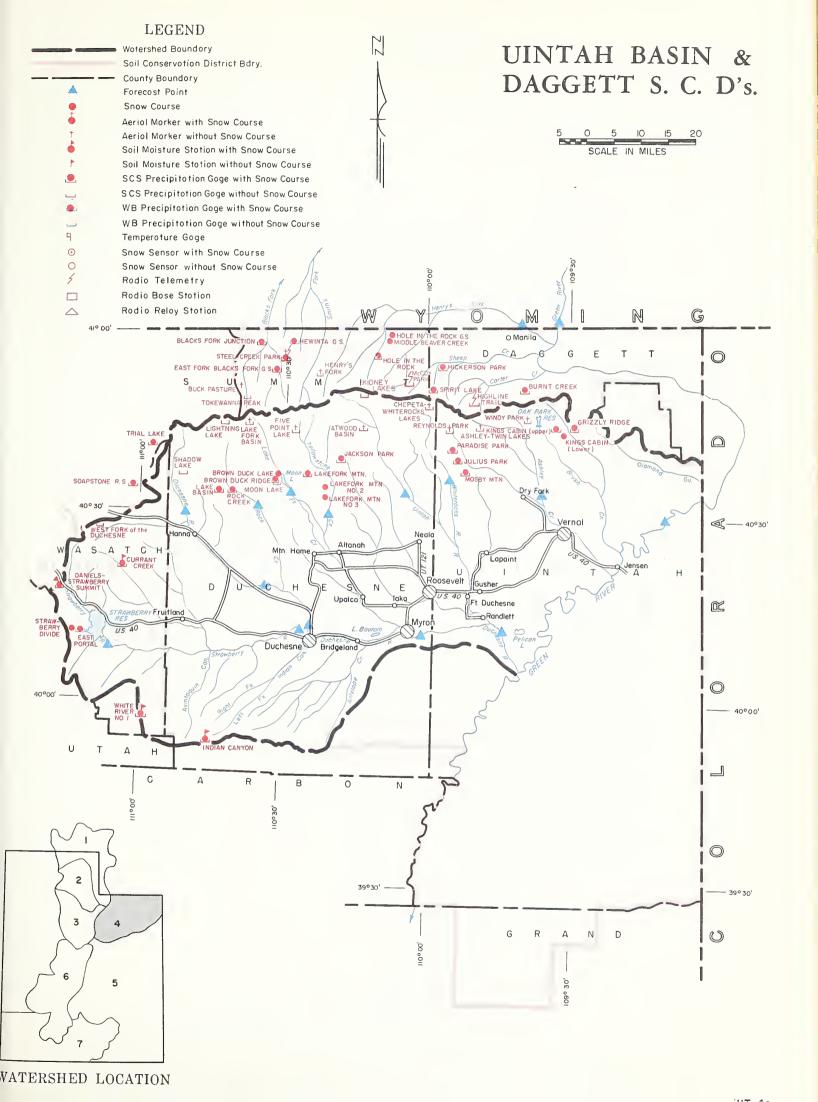
LEGEND

	Numbering system (example)
7ر10	Snow Course Only
10J7m	Soil Moisture Station Only
10J7a	Aerial Marker Only
10J7p	Precipitation Gage Only
10]7s	Snow Sensor Only
10J7T	Temperature Gage Only
10J7A	Snow Course and Aerial Marker
10J7M	Snow Course and Soil Moisture Station
10J7P	Snow Course and Precipitation Gage
IOJ7MA	Snow Course and Soil Moisture Station and Aerial Marker
10J7MP	Snow Course and Soil Moisture Station and Precipitation Gage
10J7S	Snow Course and Snow Sensor
×	Adjacent Drainage
	Padia Tolomatry

UTAH LAKE, JORDAN RIVER & TOOELE VALLEY WATERSHEDS

W			THIS YEAR	, — · · · · · · · · · · ·	PAST RECORD Water Content (inches)		
DRAINAGE BASIN and/or SNOW COUR		Date of Survey	Snow Depth (Inches)	Water Content (Inches)		Average	
NAME	Elevation				Last Year	Average	
JTAH LAKE				-			
Beaver Creek R. S. x Camp Altamont Clear Creek Ridge #2 Clear Creek Ridge #3 Daniels-Strawberry Smt. East Portal Payson R. S. Rock Bridge Soapstone R. S. South Fork R. S. Strawberry Divide Cimpanogos Cave Camp Cimpanogos Divide Crial Lake Clear Creek Ridge #1	7500 7300 8000 6600 8000 7560 8050 6750 7800 6100 8000 5500 8140 9800 9200	1/29 1/29 1/28 1/28 1/28 1/30 1/27 1/29 1/29 1/29 1/29 1/29 1/29 1/29	27 24 35 25 34 23 32 25 38 7 44 5 44 76 40	7.3 8.8 11.2 6.0 12.2 8.7 12.2 9.0 10.3 2.2 16.4 1.3 16.5 26.8 13.5	5.5 8.0 8.3 5.0 6.9 7.3 13.5 7.6 8.8 2.8 13.6 0.3 11.4 16.0	5.2b 9.7 7.9b 4.7b 8.9 6.1 9.7b 6.8b 7.7b 4.7 10.6 1.8 15.4 14.8b	
JORDAN RIVER							
Lamb's Canyon Middle Canyon x Mill D. South Fork Parley's Canyon Summit Silver Lake	6600 7000 7400 7500 8725	1/29 1/29 1/29 1/28 1/29	38 27 42 44 50	13.8 10.1 16.4 15.7 22.0	12.9 8.0 15.0 14.2 16.8	8.6 6.8b 11.3 10.5 14.7	
FOONOTES - See last page							

DRAINAGE BASIN and	ELEVATION	CURRENT INFORMATION Date of Month's +			FROM APPROX. OCT. I TO D		
PRECIPITATION GAGE LOCATION	ELEVATION	Reading	Precipitation	Average +	This Year	Average +	Percent of Average
JTAH LAKE	,						
Clear Creek Ridge #2 Daniels-Strawberry Smt. Cast Portal Payson R. S. Coapstone R. S. Cimpanogos Divide Crial Lake	8000 8000 7800 8050 7800 8200 9800	1/28 1/28 1/30 1/27 1/29 1/29	3.01 2.35 1.00 4.49 2.50 6.85	2.62b 2.90b 3.37 3.84b 2.71b 3.94 4.47b	13.64 13.40	8.97* 10.95b 10.41* 10.01b 9.42* 15.95 12.89*	162 145 131 134 165 197
ORDAN RIVER & TOOELE VAL	LEY						
ambs Canyon #2 Middle Canyon Mt. Dell Dam Parley's Canyon Smt. Milver Lake (Brighton)	7400 7000 5500 7500 8725	1/29 1/29 1/31 1/28 1/31	0.04 1.53 1.50 4.49	3.32b 2.02 3.94* 5.09	12.75 25.62 22.56	9.55* 7.50 11.64* 16.56	170 220 136
'OOTNOTES - See last page							



INDEX

NO.	STATE	NAME	SEC.	TWP. RGE.	ELEV.
9J11a P 10J21P 10J22P 10J23a 10J24ap 10J4P 9J8P 9J15p 10J1 10J3 9J2 9J1P 10J37p 10J2 9J10a P 9J7P 10J20p 10J31P 9J12ap		Ashley Twin Lakes Black's Fork G.SEast Fork Black's Fork Junction Buck Pasture Henry's Fork Hewinta G.S. Hickerson Park Highline Trail Hole-in-the-Rock Hole-in-the-Rock G.S. King's Cabin (lower) King's Cabin (upper) McCoy Park Middle Beaver Creek Reynolds Park Spirit Lake Steel Creek Park Tokewanna Peak Windy Park	UTAH (abo 20 25 33 14 29 33 24 23 13 32 23 & 26 22 6 31 9 10 17 23 1	Ve Duche 1S 19E 2N 12E 3N 12E 1N 11E 2N 14E 3N 13E 2N 17E 1N 19E 2N 15E 3N 16E 1S 21E 1N 17E 3N 16E 1S 18E 1N 17E 2N 13E 1N 17E 2N 13E	10,500 9,300 8,925 9,700 10,000 9,500 9,100 10,250 9,150 8,300 8,600 8,730 10,680 8,550 10,400 10,300 9,900 9,800
10J27ap 10J9P 9J14P 9J9ap 11J32MP 11J23MP 11J27P 10J26ap 9J13P 10J19P 10J38P 10J25a 10J10P 10J11 10J12 10J29p 9J5 9J5 9J3P 10J18P 10J32p 10J25P 11J8 10J35P 11J8 10J8P 11J35P 10K2MP		Atwood Basin Brown Duck Lake Burnt Creek Chepeta-Whiterocks Lakes Currant Creek Daniels-Strawberry Summit x East Portal x Five Point Lake Grizzley Ridge Indian Canyon Jackson Park Julius Park Lake Basin Lakefork Mountain Lakefork Mountain Lakefork Mountain #2 Lakefork Mountain #3 Lightning Lake Mosby Mountain Paradise Park Rock Creek Shadow Lake Soapstone R.S. x Strawberry Divide x Trial Lake x West Fork of the Duchesne White River #1 x	21 2 4 3 31 20 36 28 8 2 23 20 23 13 2 & 3 17 29 24 27 7 21 28 9 34 & 35 5 22 11	1S 15E 2N 6W 1N 20E 1S 17E 1S 10W 2S 12W 7S 6E 4N 5W 1S 22E 11S 10E 3N 4W 3N 1E 3S 8W 4N 7W 2N 5 W 2N 4W 2N 4W 2N 4W 2N 4W 2N 4W 2N 4W 2N 5W 2N 4W 2N 6E 3N 1E 2N 7W 3N 8W 3S 8E 7S 6E 2S 9E 1N 19E 10S 8E	10,300 7,900 10,300 7,800 8,000 7,560 11,000 8,500 9,100 11,300 9,800 10,800 11,100 10,200 8,900 8,100 10,950 9,500 10,150 7,800 8,000 9,800 10,150 7,800 8,000 9,800 10,250

LEGEND Numbering system (example)

10J7	Snow Course Only
10J7m	Soil Moisture Station Only
10J7a	Aerial Marker Only
10J7p	Precipitation Gage Only
10J7s	Snow Sensor Only
10J7T	Temperature Gage Only
10J7A	Snow Course and Aerial Marker
10J7M	Snow Course and Soil Moisture Station
10J7P	Snow Course and Precipitation Gage
10J7MA	Snow Course and Soil Moisture Station and Aerial Marker
10J7MP	Snow Course and Soil Moisture Station and Precipitation Gage
10J7S	Snow Course and Snow Sensor
×	Adjacent Drainage
*	Radio Telemetry

UINTAH BASIN & DAGGETT SCD's

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD Water Content (inches)		
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average †	
UINTAH BASIN SCD							
Daniels-Strawberry Smt. x East Portal x Indian Canyon Julius Park Lakefork Mountain Lakefork Mountain #2 Lakefork Mountain #3 Mosby Mountain Paradise Park Soapstone R. S. x Strawberry Divide x Trial Lake x Burnt Creek Grizzly Ridge	8000 7560 9100 9800 10200 8900 8100 9500 10100 7800 8000 9800 7900 8500	1/28 1/30 1/26 1/28 1/28 1/28 1/28 1/28 1/29 1/29 1/30 1/29 1/29	34 23 29 37 33 23 29 34 38 44 76 22 32	12.2 8.7 8.1 10.8 8.7 5.9 5.8 7.9 11.1 10.3 16.4 26.8 6.5 9.3	6.9 7.3 5.6 7.0 5.9 2.5 2.1 4.6 5.8 8.8 13.6 16.0	8.9 6.1 7.3 7.41 6.8 5.0 4.2 6.41 7.81 7.71 10.6 14.81	
<u>UINTAH BASIN - Aerial Marke</u> Ashley Twin Lakes A	<u>rs</u> 10500		Z				
Atwood Basin A Buck Pasture A Chepeta-Whiterocks Lakes Five Point Lake A	10250 9700 10300 11000		o t F		 		
Henry's Fork A Lakefork Basin A Reynolds Park A Windy Park A Steel Creek Park A	10000 11100 10400 9400 9900	7	1 o w n		 		

PRECIPITATION (Inches)

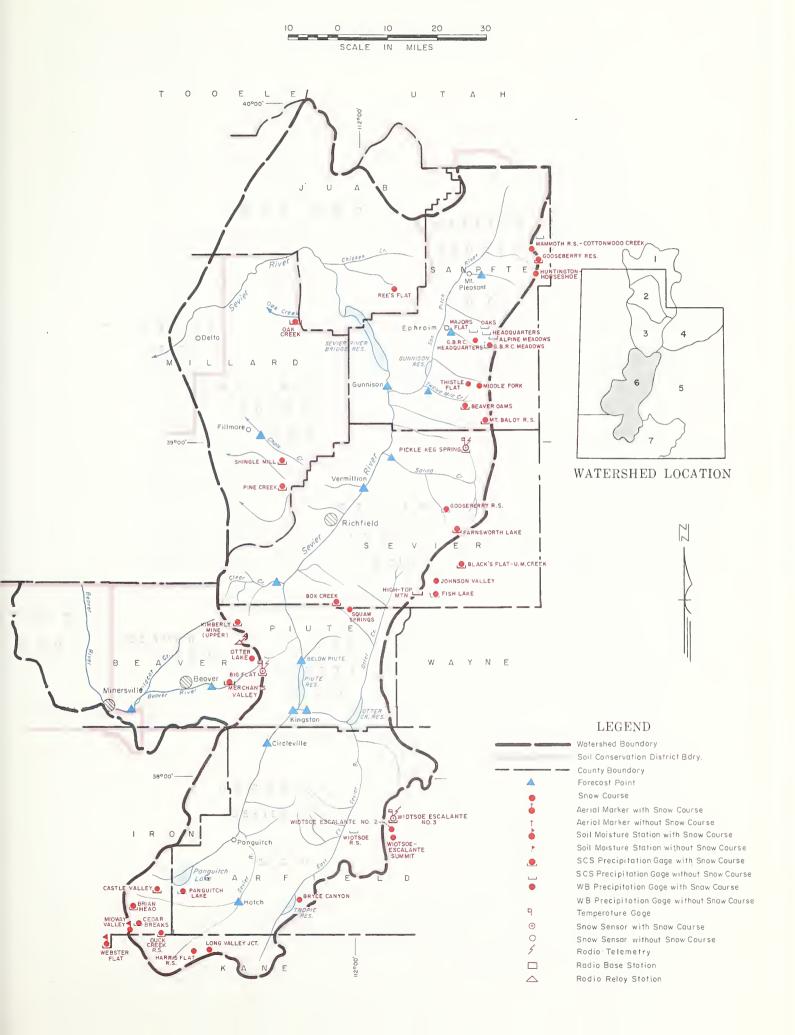
DRAINAGE BASIN and		CURRENT INFORMATION			FROM APPROX. OCT. I			
PRECIPITATION GAGE LOCATION	ELEVATION	Date of Reading	Month's Precipitation	Average +	This Year	Average +	Percent of Average	
DAGGETT SCD Burnt Creek	7900	1/29	3.06		7.78			
UINTAH BASIN SCD Daniels-Strawberry Smt x East Portal Ridge x Grizzly Ridge Indian Canyon Julius Park Lakefork Mountain Moon Lake Mosby Mountain Paradise Park Soapstone R. S. Trial Lake x	8000 7800 8500 9100 9800 10500 8150 9500 10100 7800 9800	1/28 1/30 1/29 1/26 1/28 1/28 1/31 1/28 1/28 1/29 1/29	3.01 2.35 2.64 1.62 1.98 2.90 1.60 1.60 2.39 4.49 6.85	2.90b 3.37 1.53b 1.76* 2.24b 1.16 1.92* 2.71b 4.47b	13.64 10.58 9.00 8.57 9.39 5.80 7.43 10.02 15.55	10.95b 10.41* 9.21b 7.62* 6.94b 7.49 8.38* 9.42* 12.89*	145 131 98 112 135 77 120 165 197	
FOOTNOTES - See last page								

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR		PAST RECORD Water Content (inches)		
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (!nches)	Last Year	Average	
PRICE RIVER							
Clear Creek Ridge #2 x Dry Valley Divide Gooseberry Reservoir Indian Canyon Jones Ranch Mammoth R. S Ctnwd. Crk. Mud Creek #2	8000 7800 8700 9100 7600 8800 8300	1/28 1/28 1/27 1/26 1/28 1/27 1/28	35 28 36 29 12 39 33	11.2 8.8 13.9 8.1 3.8 15.8 10.6	8.0 6.0 12.8 5.6 3.4 13.7 9.8	7.98 6.0 10.2 7.3 3.9 11.08 7.19	
SAN RAFAEL RIVER							
Buck Flat G.B.R.C. Meadows x Gooseberry Reservoir x Red Pine Ridge Rush Pond Upper Joe's Valley Wrigley Creek Orange Olsen	9400 10000 8700 9400 9800 8900 9000 7300	1/28 1/29 1/27 1/29 1/28 1/29 1/28 1/29	37 52 36 33 33 19 27 0	12.4 20.0 13.9 10.8 9.6 5.4 6.9	13.1 17.0 12.8 14.2 9.1 8.8 6.4	8.91 13.21 10.2 9.61 8.21 5.41 6.41	
FREMONT RIVER							
Farnsworth Lake x	9900	1/28	42	15.5	15.7	9.41	
FOOTNOTES - See last page							

PRECIPITATION (Inches)

DRAINAGE BASIN and	CURRENT INFORMATION ELEVATION Date of Month's +					PPROX. OCT 1	
PRECIPITATION GAGE LOCATION	ELEVATION	Nate of Reading	Month's Precipitation	Average +	This Year	Average +	Percent of Average
RICE RIVER							
lear Creek Ridge #2 x	8000	1/28		2.62b	14.54	8.97*	162
ooseberry Reservoir	8700 9100	1/27	2.03	3.39b		10.44*	135
ndian Canyon Ammoth R. S. #2	8600	1/26 1/27	1.62	1.53b 3.05b	9.00 14.79	9.21b 11.35*	98 130
ud Creek	8300	1/28	1.65	2.42*	9.60	8.89*	108
AN RAFAEL RIVER							
uck Flat .B.R.C. Meadows x	9400	1/28	1.30	3.41b 4.37	13.95	9.05*	154
ooseberry Reservoir x	8700	1/29 1/27	2.30 2.03	3.39b		12.04 10.44*	152 135
range Olsen	7300	1/29	0.75		5.35		
ed Pine Ridge	9400	1/29	1.90	4.65b	15.60	10.50*	148
REMONT RIVER							
arnsworth Lake x	9900	1/28	1.34	3.75b	8 9/1	9.77b	92
almoworth Hake A		1/20	T • 24	J. / JD	0.54	7.770	72
					·		
OOTNOTES - See last pag	ge						

SEVIER RIVER BASIN including BEAVER RIVER



INDEX

		_					
NO.	STATE	NAME		SEC.	TWP.	RGE.	ELEV.
		UPPER SEVIER RI	IVER (South o	f Richfield,	Utah)		
12L7PT 12L4P 12M8 12M1P 12M1P 12M4P 11L3 P 12M5 11L9 P 12L6P 12M6 12M2M 12M7P 12L5 11M1 11M2 PT 11M3P 11M4P		Big Flat x Box Creek Bryce Canyon Castle Valley Cedar Breaks Duck Creek R.S. Fish Lake x Harris Flat High-Top Mountain. Kimberly Mine Long Valley Junction of Midway Valley Panguitch Lake Squaw Springs Widtsoe-Escalante #2 of Widtsoe-Escalante #3 of Widtsoe R.S.	nmit x x	18 33 36 23 2 11 35 24 36 11 22 26 4 & 5 3 22 22 22 22	29S 26S 36S 36S 37S 38S 26S 27S 38S 27S 38S 37S 36S 27S 34S 34S 34S 34S	4W 2W 4W 8W 9W 8W 1E 7W 1E 5W 6W 9W 7W 2W 1W 1W 1W	10,290 9,800 8,000 9,700 10,390 8,700 8,700 7,700 11,400 9,300 7,500 9,800 8,200 9,300 9,500 9,500 9,500 7,600
		LOWER SEVIER R	IVER (Includ				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
11K13P 11L1P 11K11P 11K10 11L2 P 11K4P 11K5 11K3MP 11K34 11K12P 11K2P 11K39 PT 12L1P 11K36 12L11P 11K35		Beaver Dams Farnsworth Lake G.B.R.C. Headquarte G.B.R.C. Meadows Gooseberry R.S. Gooseberry Reservoir x Huntington-Horseshoe Mammoth R.SCotton Middle Fork Mt. Baldy R.S. Oak Creek Pickle Keg Springs Pine Creek Rees's Flat Shingle Mill Thistle Flat	ers x x	27 27 & 33 21 26 & 27 22 25 12 13 16 19 9 4 24 20 5	19S 23S 17S 17S 23S 13S 14S 13S 14S 19S 17S 21S 22S 15S 22S 18S	3E 2E 4E 4E 5E 5E 5E 4E 4E 3W 3E 4W 2E 3W 3E	8,000 9,900 8,700 10,000 8,400 8,700 9,800 9,600 9,500 7,760 9,600 8,700 7,300 6,200 8,500
		BEAVER RIVER					
12L7PT 12L9P 12L8	U U U	Big Flat Merchant's Valley Otter Lake		18 8 & 9 1	29S 29S 29S	4W 5W 5W	10,290 8,200 9,300

LEGEND

	Numbering system (example)
10J7	Snow Course Only
10 J7m	Soil Moisture Station Only
10 J 7a	Aerial Marker Only
10J7p	Precipitation Gage Only
10J7s	Snow Sensor Only
10J7T	Temperature Gage Only
10J7A	Snow Course and Aerial Marker
10J7M	Snow Course and Soil Moisture Station
10J7P	Snow Course and Precipitation Gage
10J7MA	Snow Course and Soil Moisture Station and Aerial Marker
10J7MP	Snow Course and Soil Moisture Station and Precipitation Gage
10J7S	Snow Course and Snow Sensor
×	Adjacent Drainage
*	Radio Telemetry

SEVIER RIVER BASIN INCLUDING BEAVER RIVER

1/27 1/29 1/28 1/28 1/28 1/28 1/28 1/27	39 13 28 24 32 11 42	12.6 3.2 9.6 7.9 9.8	12.5 0.2 2.3 0.1	9.6b 2.6 7.6b
1/29 1/28 1/28 1/28 1/28 1/28 1/27 1/27	13 28 24 32 11 42	3.2 9.6 7.9 9.8	12.5 0.2 2.3	9.6b 2.6
1/29 1/28 1/28 1/28 1/28 1/28 1/27 1/27	13 28 24 32 11 42	3.2 9.6 7.9 9.8	0.2 2.3	2.6
1/29 1/28 1/28 1/28 1/28 1/28 1/27 1/27	13 28 24 32 11 42	3.2 9.6 7.9 9.8	0.2 2.3	2.6
1/27 1/28	10 19 23 22	4.3 14.2 3.7 4.8 6.1 6.3	10.2 0.0 6.0 1.5 3.2 4.8	4.7b 8.7b 2.2b 12.2b 4.0 5.2 6.0b
1/28 1/29 1/29 1/28 1/27 1/27 1/29 1/25	42 34 52 24 36 39 19 32	15.5 11.6 20.0 7.9 13.9 15.8 5.9 11.2	15.7 10.6 17.0 8.8 12.8 13.7 5.4	9.4b 8.3b 13.2b 6.2b 10.2 11.0b 3.9b
1/27	30	12.6	12 5	9.6b
1/27 1/27 1/27	18 34	6.4	5.1	4.9 7.5b
	1/29 1/29 1/28 1/27 1/27 1/29 1/25	1/29 34 1/29 52 1/28 24 1/27 36 1/27 39 1/29 19 1/25 32	1/29 34 11.6 1/29 52 20.0 1/28 24 7.9 1/27 36 13.9 1/27 39 15.8 1/29 19 5.9 1/25 32 11.2 1/27 18 6.4	1/29 34 11.6 10.6 1/29 52 20.0 17.0 1/28 24 7.9 8.8 1/27 36 13.9 12.8 1/27 39 15.8 13.7 1/29 19 5.9 5.4 1/25 32 11.2 1/27 18 6.4 5.1

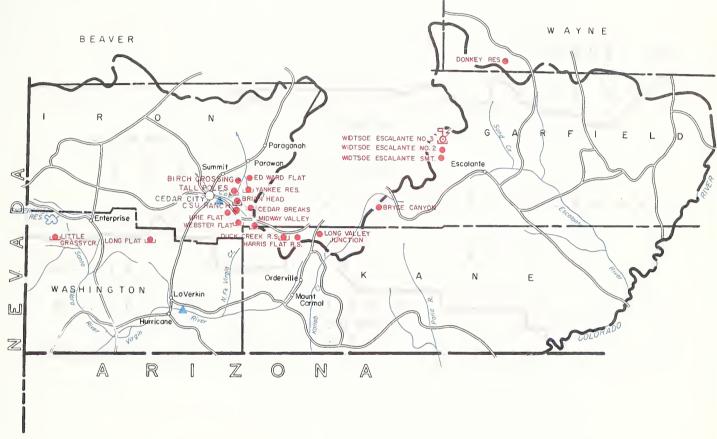
PRECIPITATION (Inches)

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	Date of Reading	Month's Precipitation	Average +	This Year	Average +	Percent of Average
SEVIER RIVER							
Big Flat x Duck Creek R. S. Farnsworth Lake G.B.R.C. Headquarters G.B.R.C. Meadows G.B.R.C. Oaks Gooseberry R. S. Gooseberry Reservoir x Kimberly Mine Mammoth R. S. #2 x Shingle Mill Webster Flat x Widtsoe-Escalante #3 Widtsoe R. S.	10290 8560 9900 8700 10000 7655 7800 8700 9100 8600 6200 9200 9500 7600	1/27 1/28 1/29 1/29 1/29 1/29 1/27 1/28 1/27 1/29 1/28 1/27	0.60 0.65 1.34 1.65 2.30 1.21 1.34 2.03 1.08 1.08 1.00 0.48 0.26	3.63b 3.27b 3.75b 3.66 4.37 2.61 2.87b 3.39b 3.24* 3.05b 2.98* 3.53* 2.30b 0.68	8.94 13.85 18.30 8.28 14.14 12.83 14.79 10.95	10.11 12.04 6.91 6.69* 10.44* 9.84* 11.35* 7.60* 11.29*	99 92 137 152 120 135 130 130 144 104 86
BEAVER RIVER							
Beaver Canyon P. H. Merchant Valley	7275 8650	1/27	0.35				
FOOTNOTES - See last page							

EAST GARFIELD, KANE, WASHINGTON AND IRON COUNTIES

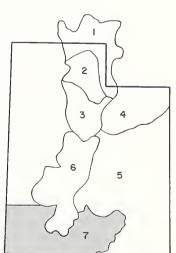






LEGEND

Wotershed Baundary Sail Canservation District Bdry. County Baundary Forecast Point Snow Course Aerial Marker with Snaw Course Aerial Marker without Snow Course Soil Moisture Stotian with Snow Caurse Sail Moisture Station without Snow Course SCS Precipitation Gage with Snaw Course SCS Precipitation Gage without Snaw Course . WB Precipitation Goge with Snow Course WB Precipitation Gage without Snaw Course Temperature Gage 0 Snow Sensar with Snow Course 0 Snaw Sensor without Snow Course Radio Telemetry Radia Bose Statian Radia Relay Station



WATERSHED LOCATION

INDEX

NO. S	TATE	NAME	SEC.	TWP.	RGE.	ELEV.
		PARIA RIVER				
12M8	U	Bryce Canyon x	36	36\$	4W	8,000
		PAROWAN CREEK				
12M16 12M14 12M12 12M15 P 12M11P	U U U U	Birch Crossing Brian Head Ed Ward Flat Tall Poles Yankee Reservoir	23 10 17 26 & 35 20	35S 36S 35S 35S 35S	9W 9W 8W 9W 8W	8,100 10,000 8,300 8,800 8,700
		COAL CREEK				
12M1P 12M17 12M2M 12M10 12M3MP	U U U U	Cedar Breaks x CSU Ranch Midway Valley x Urie Flat Webster Flat x	2 18 26 11 20	37 S 37 S 37 S 37 S 37 S	9W 9W 9W 10W 9W	10,390 8,200 9,800 8,450 9,200
	ΕN	TERPRISE TO NEW HARMON	Y DRAII	VA G E	S	
13M4MP 13M2MP	U U	Little Grassy Creek Long Flat	15 2	38S 38S	17W 14W	6,100 8,000
		ESCALANTE RIVER				
11M1 11M2 PT 11M3P	U U U	Widtsoe-Escalante Summit Widtsoe-Escalante #2 Widtsoe-Escalante #8	22 22 22	34S 34S 34S	1W 1W 1W	9,500 9,500 9,500
		VIRGIN RIVER				
12M1P 12M4P 12M5 12M6 12M2M 12M3MPT	U U U U U U	Cedar Breaks x Duck Creek R.S. x Harris Flat x Long Valley Junction Midway Valley x Webster Flat	2 11 24 22 26 20	37 S 38 S 38 S 38 S 37 S 37 S	9W 8W 7W 6W 9W	10,390 8,700 7,700 7,500 9,800 9,200

LEGEND

	Numbering system (example)
10 J 7	Snow Course Only
10J7m	Soil Moisture Station Only
10 J 7a	Aerial Marker Only
10J7p	Precipitation Gage Only
10J7s	Snow Sensor Only
10J7T	Temperature Gage Only
10J7A	Snow Course and Aerial Marker
10J7M	Snow Course and Soil Moisture Station
10J7P	Snow Course and Precipitation Gage
10J7MA	Snow Course and Soil Moisture Station and Aerial Marker
10J7MP	Snow Course and Soil Moisture Station and Precipitation Gage
10J7S	Snow Course and Snow Sensor
×	Adjacent Drainage
*	Radio Telemetry

EAST GARFIELD, KANE, WASHINGTON & IRON CO.

OW			THIS YEAR	<u> </u>		ECORD
DRAINAGE BASIN and/or SNOW COURSE		Date of Survey	Snow Depth (Inches)	Water Content (Inches)		ent (inches)
NAME	Elevation	(1.33/10)	(manes)	(es)	Last Year	Average
ESCALANTE RIVER Widtsoe-Escalante Smt. Widtsoe-Escalante #2 Widtsoe-Escalante #3	9500 9500 9500	1/27 1/27 1/27	10 19 23	3.7 4.8 6.1	1.5 3.2 4.8	4.0 5.2 6.01
PARIA RIVER						
Bryce Canyon x	8000	1/29	13	3.2	0.2	2.6
VIRGIN RIVER & COAL CREEK CSU Ranch Duck Creek R. S. x Harris Flat x Long Valley Junction Midway Valley x Urie Flat Webster Flat	8200 8700 7700 7500 9800 8450 9200	1/28 1/28 1/28 1/28 1/28 1/28 1/28	16 28 24 11 42 14 32	6.2 9.6 7.9 4.3 14.2 5.4 11.3	1.1 2.3 0.1 0.0 6.0 2.8 4.8	7.6 4.7 2.2 12.2 4.1 8.9
PAROWAN CREEK Birch Crossing	8100	1/28	10	3.3	3.6	
Brian Head Tall Poles	10000 8800	1/28 1/28	39 28	12.3 8.4	10.1 6.2	
FOOTNOTES - See last page						

PRECIPITATION (Inches)

DRAINAGE BASIN and	E1 E1/4 E1011	CURRENT INFORMATION					
PRECIPITATION GAGE LOCATION	ELEVATION	Date of Reading	Month's Precipitation	Average +	This Year	Average +	Percent of Average
ESCALANTE RIVER							
Widtsoe-Escalante	9500	1/27	0.48	2.30b	6.59	7.65b	86
VIRGIN RIVER							
Duck Creek R. S. Webster Flat	8560 9200	1/28 1/28	0.65	3.27b 3.53*		10.18*	99
vesseer frac	7200	1/20	1.00	3.33	11.70	11.27	104
COAL CREEK							
Webster Flat x	9200	1/28	1.00	3.53*	11.70	11.29*	104
PAROWAN CREEK							
	0000	4 -					
Tall Poles	8800	1/28	0.65		8.13		
FOOTNOTES - See last pa	ıge						

FOOTNOTES

- 1. Data supplied by U. S. Forest Service
- 2. Data supplied by U. S. Weather Bureau
- 3. Data supplied by U. S. Geological Survey, Bureau of Reclamation and River Commissioners
- 4. Data obtained by radio USU-SCS Cooperative Sites
- + 1953-67 15-year average period
- b Average of all past record less than 15 years
- c Taken at Compromise point
- A Aerial observation water content estimated
- x Adjacent drainage
- * Partly estimated

The following footnotes apply only to Streamflow Forecast pages.

- (1) Includes UP&L Co. tailrace and Logan, Hyde Park & Smithfield Canal.
- (2) Observed flow plus change in storage in East Canyon Reservoir.
- (3) Inflow record as computed by U. S. Bureau of Reclamation.
- (4) Observed flow Weber River near Wanship, Utah, plus change in storage in Rockport Reservoir, plus diversion by Weber-Provo Canal.
- (5) Includes diversion by Weber-Provo Canal and change in storage in Rockport Reservoir.
- (6) Observed flow minus diversions thru Duchesne tunnel and Weber-Provo Canal.
- (7) Observed flow plus change in storage in Deer Creek Reservoir, minus diversions thru Duchesne tunnel and Weber-Provo Canal.
- (8) Change in storage plus diversion thru Strawberry tunnel.
- (9) Observed flow plus change in storage in Otter Creek Reservoir.
- (10) Gage is below diversions near Salina
- (11) Observed flow plus change in storage in Otter Crk & Piute Reservoirs.
- (12) Observed flow at Rockyford Dam, corrected for change in storage in Minersville Reservoir.
- (13) Observed flow plus diversion through Duchesne Tunnel.
- (14) Observed flow plus change in storage in Moon Lake Reservoir.
- (15) Observed flow plus change in storage reservoir.
- (16) Corrections made for Strawberry, Moon Lake, Starvation Reservoir, Strawberry and Duchesne Tunnels.
- (a) Runoff forecasts are based principally on mountain snow cover and on the assumption that precipitation and temperature will be near average from the present time to the end of the forecast period. Appreciable deviations from normal of temperature and/or precipitation will correspondingly modity these forecasts. The discharge data is taken from preliminary records of the U. S. Geological Survey.



Agencies Cooperating in Utah Snow Surveys

U.S. GOVERNMENT AGENCIES

- U.S. Department of Agriculture Soil Conservation Service Forest Service
- U.S. Department of Commerce Weather Bureau
- U.S. Department of Interior
 Bureau of Reclamation
 Geological Survey
 National Park Service

STATE AGENCIES

Utah State University
Utah Fish and Game Department
Utah State Department of Natural
Resources, Division of Water Rights
Bear River Commissioner
Price River Commissioner
Provo River Commissioner
Sevier River Commissioners
Spanish Fork River Commissioner
Utah Lake and Jordan River Commissioner

MUNICIPALITIES

Manti Salt Lake City

ORGANIZED PUBLIC AGENCIES

Beaver River Water Users Association
Board of Canal Presidents - Jordan River
Emery Canal and Reservoir Company
Moon Lake Water Users Association
Ogden River Water Users Association
Provo River Water Users Association
Strawberry Water Users Association
Sevier River Water Users Association

PRIVATE AGENCIES

Kaiser Steel Corporation

UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE FEDERAL BLDG. -- ROOM 4012 SALT LAKE CITY, UTAH 84111

OFFICIAL BUSINESS



POSTAGE AND FEES PAID U.S. DEPARTMENT OF AGRICULTURE

FEDERAL - STATE - PRIVATE

COOPERATIVE SNOW SURVEYS

Furnishes the basic data necessary for forecasting water supply for irrigation, domestic and municipal water supply, hydro-electric power generation, navigation, mining and industry

"The Conservation of Water begins with the Snow Survey"